I CLAIM:

1. A dual cable force balancing mechanism for use with a pair of main brake cable segments and a pair of rear brake arms of a bicycle, the dual cable force balancing mechanism comprising:

a brake arm actuation assembly defining a longitudinal axis positionable between the main brake cable segments, the brake arm actuation assembly being attachable to the rear brake arms; and

a pivot member including main attachment portions disposed about the longitudinal axis for respectively attaching the main cable segments, the pivot member being rotatably coupled to the brake arm actuation assembly for pivoting the pivot member with respect to the longitudinal axis.

2. The dual cable force balancing mechanism of Claim 1 wherein the brake arm actuation assembly includes a pair of rear brake cable segments attachable to the rear brake arms, each of the rear brake cable segments is disposed in mechanical communication with the pivot member.

3. The dual cable force balancing mechanism of Claim 2 wherein the brake arm actuation assembly includes a hanger body, the hanger body is rotatably coupled to the pivot member, the hanger body includes rear attachment portions respective positionable about the longitudinal axis, the rear brake cable segments are attached to the hanger body respectively at the rear attachment portions.

4. The dual cable force balancing mechanism of Claim 3 wherein the hanger body includes a lip with the rear attachment portions disposed along the lip, the rear brake cable segments are integrated into a single cable and the lip is configured to engage the rear brake cable segments with the rear brake cable segments being looped about the lip.

5. The dual cable force balancing mechanism of Claim 4 wherein the hanger body includes a pivot member support and the lip extends from the pivot member support.

6. The dual cable force balancing mechanism of Claim 4 wherein the hanger body includes a pivot member support, the pivot member support includes first and second plates, the lip extends between the first and second plates, the pivot member is rotatably connected to and between the first and second plates.

7. The dual cable force balancing mechanism of Claim 3 wherein the rear brake cable segments are rotatably attached to the hanger body respectively at the rear attachment portions.

8. The dual cable force balancing mechanism of Claim 3 wherein the pivot member is a cross bar having opposing ends and a central portion, the pivot member is attached to the hanger body at the central portion, the main attachment portions are respectively disposed adjacent the opposing ends.

9. The dual cable force balancing mechanism of Claim 3 wherein the pivot member is a pulley and includes a central portion, the pivot member is attached to the hanger body at the central portion.

10. The dual cable force balancing mechanism of Claim 3 further includes a fastener rotatably coupling the pivot member to the hanger body.

11. The dual cable force balancing mechanism of Claim 2 wherein the main brake cable segments are integrated into a single cable, the pivot member is configured to engage the main brake cable segments with the main brake cable segments being looped about the pivot member.

12. The dual cable force balancing mechanism of Claim 2 wherein the pivot member includes a pivot pin element disposed between the main attachment portions and positionable orthogonal to the longitudinal axis, the rear brake cable segments are joined at the pivot pin element.

13. The dual cable force balancing mechanism of Claim 12 wherein the rear brake cable segments are cooperatively looped over the pin element with the pivot pin element.

14. The dual cable force balancing mechanism of Claim 12 wherein the rear brake cable segments are cooperatively wound about the pivot pin element.

15. The dual cable force balancing mechanism of Claim 14 wherein the rear brake cable segments are formed of a single spring wire.

16. The dual cable force balancing mechanism of Claim 1 wherein the pivot member is rotatably attachable to the main brake cables.

17. A bicycle comprising:

a bicycle frame;

a rear wheel supported by the bicycle frame;

a rear brake assembly including:

a rear brake lever;

a pair of main brake cable segments in mechanical communication with the rear brake lever;

a pair of rear brake arms in operable communication with the rear wheel; and

a dual cable force balancing mechanism including:

a brake arm actuation assembly defining a longitudinal axis positioned between the main brake cable segments, the brake arm actuation assembly being attached to the rear brake arms; and

a pivot member including main attachment portions disposed about the longitudinal axis, the main cable segments being respectively attached to the pivot member at main attachment portions, the pivot member being rotatably coupled to the brake arm actuation assembly for pivoting the pivot member with respect to the longitudinal axis.

18. The bicycle of Claim 17 wherein the dual cable force balancing mechanism includes a pair of rear brake cable segments attached to the rear brake arms, each of the rear brake cable segments is disposed in mechanical communication with the pivot member.

19. The bicycle of Claim 17 wherein the bicycle frame includes a seat post portion, the dual cable force balancing mechanism is disposed between the seat post portion and the rear brake arms.